

**NATIONAL WEATHER SERVICE INSTRUCTION 10-515
NOVEMBER 1, 2005**

*Operations and Services
Public Weather Services, NWSPD 10-5*

WFO NON-PRECIPIATION WEATHER PRODUCTS SPECIFICATION

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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SUMMARY OF REVISIONS: This directive supercedes NWSI 10-515, “WFO Non-Precipitation Weather Products Specification,” effective December 24, 2004. The following revisions were made to this instruction:

- 1) Added non-precipitation weather event definition in Section 2.
- 2) Added Valid Time Event Code (VTEC) information to the product formats and examples.
- 3) Made mandatory the use of AWIPS Graphical Hazard Generator (GHG) software to create and issue all winter weather watches, warnings and advisories to ensure proper headline and P-VTEC format.
- 4) Removed the option to issue Air Stagnation Advisories under the ASA product category.

The VTEC information in the product formats and examples will be operationally implemented on November 1, 2005. The VTEC information is provided in Tables 2, 4 and 6, Figures 1-3, Sections 5.5.1, 6.5.1, 6.6.1, 7.5.1, 7.6.1, and all examples in Appendix A. Information regarding implementation of VTEC is available on the Internet at <http://www.nws.noaa.gov/os/vtec/>.

<u>signed</u>	<u>10/11/05</u>
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Director, Office of Climate, Water and Weather Services	

WFO Non-Precipitation Weather Products Specification

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1. **Introduction.** This procedural directive describes the non-precipitation weather products issued by National Weather Service (NWS) Weather Forecast Offices (WFOs), guidelines associated with these products, and detailed content and format for each product type.
2. **Non-Precipitation Weather Event.** A non-precipitation event is a meteorological phenomenon that impacts public safety, transportation, and/or commerce.
 - 2.1 **Non-Precipitation Weather Event Beginning Time.** A non-precipitation weather event begins either when either the issuance criteria are forecast to be initially met or exceeded, or when public safety, transportation and/or commerce are adversely affected as a direct result of the expected or occurring meteorological conditions before criteria are met.
 - 2.2 **Non-Precipitation Weather Event Ending Time.** A non-precipitation weather event ends when the issuance criteria are forecast to no longer be met, when meteorological conditions are expected to no longer pose a threat to public safety, transportation and/or commerce, or when such conditions are forecast to end.
3. **Multitiered Concept.** The NWS non-precipitation weather warning program will use, when appropriate, the multitiered concept to increase public awareness and promote a proper response to the impending hazardous non-precipitation weather event. Generically, the multitiered concept is:
 - a. **Outlook** – An outlook is used to indicate that a hazardous non-precipitation weather event may develop. It is intended to provide information to those who need considerable lead time to prepare for the event.
 - b. **Watch** – A watch is used when the risk of a hazardous non-precipitation weather event has increased, but its occurrence, location, and/or timing is still uncertain. It is intended to provide enough lead time so those who need to set their plans in motion can do so.
 - c. **Warning/Advisory** – These products are issued when a hazardous non-precipitation weather event is occurring, is imminent, or has a very high probability of occurrence. A warning is used for conditions posing a threat to life or property. An advisory is for less serious conditions that cause significant inconvenience and, if caution is not exercised, could lead to situations that may threaten life and/or property.

To properly apply the multitiered concept, it is important to have agreement between the forecast staff and other affected WFOs to reach a forecast consensus. This will reduce the on-again, off-again syndrome and geographical/time discontinuities, especially for the longer duration products like outlooks and watches. Proper coordination will enable the NWS to speak with one voice when alerting users to the potential for such an event.

4. Non-Precipitation Outlook (product category HWO).

4.1 Mission Connection. Non-precipitation outlooks provide our users and partners three to seven day (3-7) advance notice of a hazardous non-precipitation weather event which has the potential to threaten life or property. The primary goal of this product is to provide information to those who need considerable lead time to prepare for the event.

4.2 Issuance Guidelines. WFOs should use the Hazardous Weather Outlook (HWO) to issue non-precipitation outlooks. The HWO replaces the Special Weather Statement (SPS) as the tool to issue information about potentially hazardous non-precipitation weather expected within the next three to seven days. Non-precipitation outlooks should follow the issuance guidelines described in National Weather Service Instruction (NWSI) 10-517, section 4.2.

Exception: Based on local user requirements for major storms, some WFOs may issue a non-precipitation outlook under the product category SPS.

4.3 Technical Description. Non-precipitation outlooks should follow the format and content described in NWSI 10-517, section 4.3.

5. Non-Precipitation Watches (product category NPW).

5.1 Mission Connection. Non-precipitation watches provide our users and partners 12-to-48 hour advance notice of hazardous non-precipitation weather events which have the potential to threaten life or property. The primary goal of this product is to provide enough lead time for those who need to set their plans in motion.

5.2 Issuance Guidelines.

5.2.1 Creation Software. WFOs will use the AWIPS Graphical Hazard Generator (GHG) as the primary software to create and issue non-precipitation watches.

5.2.2 Issuance Criteria. WFOs will issue a non-precipitation watch when conditions are favorable for a hazardous non-precipitation weather event to develop over part or all of the forecast area, but the occurrence is uncertain. WFOs should issue a non-precipitation watch for the second, third, or occasionally fourth forecast periods, when there is a 50 percent or greater chance of a hazardous non-precipitation weather event meeting or exceeding local warning criteria.

5.2.2.1 Non-Precipitation Watch Products. WFOs will issue the following non-precipitation watch products:

Non-Precipitation Watch Product Name	Issuance Criteria
-----------------------------------------	-------------------

Excessive Heat Watch	Conditions are favorable for an excessive heat event to meet or exceed local Excessive Heat Warning criteria in the next 12 to 48 hours.
Freeze Watch	Conditions are favorable for a freeze event to meet or exceed Freeze Warning criteria in the next 12 to 48 hours during the locally defined growing season.
High Wind Watch	Conditions are favorable for a high wind event to meet or exceed High Wind Warning criteria in the next 12 to 48 hours.
Inland Hurricane Watch	Conditions are favorable for a tropical cyclone to spread hurricane force winds inland in the next 12 to 24 hours.
Inland Tropical Storm Watch	Conditions are favorable for a tropical cyclone to spread tropical storm force winds inland in the next 12 to 24 hours.

Table 1. Non-precipitation watch product table.

5.2.3 Issuance Time. The non-precipitation watch is an event-driven product. WFOs should issue the initial watch when the watch issuance criteria is met. Subsequent updates are issued at least once every 12 hours until a warning or advisory is issued or the watch is cancelled.

5.2.4 Valid Time. A non-precipitation watch is valid for 12 to 48 hours after the issuance time. The valid time (event start and end time) is placed in the P-VTEC line and described in the watch headline.

5.2.5 Product Expiration Time. The product expiration time is generally 12 hours after the issuance time and is placed at the end of the UGC string. The product expiration time is the time when users can expect to receive an updated NPW.

5.2.6 Event Ending Time. The event ending time is when the hazardous event is expected to end. The event ending time is placed in the P-VTEC line and described in the watch headline (e.g., FREEZE WATCH IN EFFECT FROM LATE SUNDAY NIGHT TO MONDAY MORNING).

5.3 Technical Description. Non-precipitation watches will follow the format and content described in this section.

5.3.1 Universal Geographic Code Type. Non-precipitation watches will use the (Z) form of the UGC.

5.3.2 Mass News Disseminator Broadcast Instruction Line. Not applicable.

5.3.3 Mass News Disseminator Product Type Line. The non-precipitation watch MND line is “URGENT - WEATHER MESSAGE.”

5.3.4 Non-Precipitation Watch Content. The non-precipitation watch may contain an overview section, but will include segmented forecast information.

5.3.4.1 Overview Section. The non-precipitation watch overview section is optional. If included, it should contain at least one of the following items:

- a. Overview Headline - a general headline statement that summarizes the hazardous weather threat, area affected and expected time of development. The overview headline will begin and end with three periods “...”

Examples:

...ANOTHER HIGH WIND EVENT TO IMPACT THE EAST SIDE OF THE SIERRA NEVADA MOUNTAINS ON MONDAY AND TUESDAY...
...A SIGNIFICANT HEAT WAVE MAY BE HEADED OUR WAY THIS WEEKEND...

- b. Overview - a brief, non-technical description of the developing non-precipitation event. The description may include the location and movement of large scale weather features (e.g., fronts, low pressure systems). The first line of this descriptive information will be preceded by a period “.”.

5.3.4.2 Segmented Forecast Information. Each segment of the non-precipitation watch will include a watch headline followed by a descriptive text describing why the watch was issued. Each segment describes a specific hazardous non-precipitation weather event(s) for the same geographical area.

- a. Watch Headline. The watch headline will include the following elements in the order shown:

- (1) Leading ellipsis (...)
- (2) Valid watch product name listed in Table 1.
- (3) Event action phrase defined in Table 2.
- (4) General event beginning day and time phrase defined in Appendix C (when applicable)
- (5) General event ending day and time phrase defined in Appendix C (when applicable)
- (6) Trailing ellipsis (...)

Exception: When necessary (e.g., mountainous terrain), areal descriptive terms

and elevation indicators are permitted after the ending day and time phrase and before the trailing ellipsis.

Generic Watch Headline Format:

(1) Used when watch product is in effect:
...<watch product name> <event action phrase> FROM <event beginning date and time phrase> THROUGH <event ending date and time phrase>...

(2) Used to cancel a watch prior to event beginning date and time:
...<watch product name> <event action phrase>...

Event Action Phrase. The event action phrase in the watch headline corresponds with the VTEC action code. Only the following event action phrases in Table 2 will be used in non-precipitation weatherwatch headlines:

VTEC Action Code	Description	Required Event Action Phrase	Include Time/Date phrase?
NEW	Initial Issuance	IN EFFECT	Yes
EXA	Expansion of watch area	IN EFFECT	Yes
EXB	Expansion of watch area and change to watch valid time	IN EFFECT	Yes
CON	Continuation or update of event	REMAINS IN EFFECT	Yes
EXT	Extend/shorten event start and/or ending date/time	NOW IN EFFECT	Yes
CAN	Product cancelled prior to event end time	IS CANCELLED	No
UPG	Upgrade watch - no headline		

Table 2. Event action phrases for NPW watch headlines.

a. Watch Headline Examples:

(1) Initial issuance:
 ...HIGH WIND WATCH IN EFFECT FROM SUNDAY MORNING THROUGH MONDAY MORNING...

(2) Update:
 ...HIGH WIND WATCH REMAINS IN EFFECT FROM SUNDAY MORNING THROUGH MONDAY MORNING...

- (3) Extended event end time:
...HIGH WIND WATCH NOW IN EFFECT FROM SUNDAY MORNING THROUGH MONDAY AFTERNOON...
- (4) Expansion of watch area and shortened event start and end time:
...HIGH WIND WATCH IN EFFECT FROM SATURDAY EVENING THROUGH SUNDAY EVENING...
- (5) Watch cancelled prior to event end time/date:
...HIGH WIND WATCH IS CANCELLED...

b. Watch descriptive Text. This section will provide the following watch information:

- (1) National Weather Service attribution line. For the **initial** watch, include the following phrase to begin the text of a watch:

THE NATIONAL WEATHER SERVICE IN [WFO NAME or LOCATION] HAS ISSUED AN/A (e.g., EXCESSIVE HEAT/FREEZE/HIGH WIND) WATCH.

The attribution line is optional for subsequent issuances.

- (2) Reason watch was issued.
- (3) Generalized quantitative wind speed amounts or Heat Index values, etc., based upon local warning criteria (e.g., wind speeds greater than 40 mph possible, heat index values greater than 110 F possible).
- (4) Explanation of a watch and uncertainty involved. Include the following phrase to define a non-precipitation watch:

REMEMBER...AN/A (e.g., EXCESSIVE HEAT/FREEZE/HIGH WIND) WATCH MEANS CONDITIONS ARE FAVORABLE FOR A HAZARDOUS (EXCESSIVE HEAT/FREEZE/HIGH WIND) EVENT IN AND CLOSE TO THE WATCH AREA.

- (5) Brief potential impact or Call To Action (CTA) statements. CTAs can be effective in reminding people what actions to take in preparing themselves for the potential hazardous non-precipitation weather event.

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- c. Order of Segments. Non-precipitation watches are usually placed last in the order of segments. This order was designed to place the most important and/or time sensitive information near the beginning of the message. The order of segments is:
- (1) Cancellation
 - (2) Warnings
 - (3) Advisories
 - (4) **Watches**
- d. Order of Headlines. More than one headline is required in a segment when two or more non-precipitation weather events are forecast to occur for the same UGC or geographical area.

The order of headlines will follow the order of segments.

Examples:

- (1) Dense Fog Advisory and Excessive Heat Watch in effect for the same geographical area.

...DENSE FOG ADVISORY IN EFFECT UNTIL 9 AM EST THIS MORNING...
...EXCESSIVE HEAT WATCH IN EFFECT FROM THURSDAY
AFTERNOON THROUGH FRIDAY AFTERNOON...

- (2) High Wind Warning and Wind Advisory in effect for the same mountain zone(s).

...HIGH WIND WARNING IN EFFECT UNTIL 11 AM PST WEDNESDAY
ABOVE 3000 FT...
...WIND ADVISORY IN EFFECT UNTIL 11 AM PST WEDNESDAY AT OR
BELOW 3000 FT...

5.3.5 Format.

<u>Product Format</u>	<u>Description of Entry</u>
WWaaii cccc ddhhmm NPW _{xxx}	(WMO Heading) (AWIPS ID)
URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE city state time am/pm time_zone day mon dd yyyy	(Product Name or MND) (Issuing Office) (Issuance time/date)
...<Overview headline statement>...	(Optional)
.<General non-precipitation weather synopsis>	(Optional - one to three paragraphs)
stZ001-005>015-ddhhmm- /k.aaa.cccc.pp.s.#####.yymmddThhnnZ _B -yymmddThhnnZ _E / zone st-zone st-zone st- INCLUDING THE CITIES OF city...city...city. time am/pm time_zone day mon dd yyyy	(UGC: Z & expiration time) (P-VTEC Line(s)) (Zone Names) (City Names - Optional) (Issuance time/date)
...WATCH HEADLINE...	
<Descriptive Text>	(Two to three paragraphs)
{ Includes the following information: 1. NWS attribution line (Optional after initial issuance) 2. Why watch was issued 3. Potential Impact 4. Definition of a watch with uncertainty 5. Call to Action statements }	
\$\$	(UGC Delimiter)
Name/Initials/Forecaster ID	(Optional after last segment)

Figure 1. Generic format for a non-precipitation watch.

5.4 Updates, Cancellations, and Corrections. WFOs will update non-precipitation watches at least once every 12 hours, or when there is a change in timing, areal extent, or expected conditions. WFOs should issue the updated NPW before the product expiration time is reached.

Non-precipitation watches are either upgraded into warnings or advisories, or cancelled.

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WFOs will issue a NPW to cancel a watch when the forecaster believes the threat of hazardous non-precipitation weather will not develop.

WFOs will issue correction statements for format or grammatical errors as required. To reduce format or grammatical errors, forecasters should proofread the product before transmission.

5.5 Upgrade Watch to Warning or Advisory. When a non-precipitation weather watch is upgraded to a non-precipitation weather warning or non-precipitation weather advisory for the same geographical area, the NPW segment will contain one headline and two P-VTEC lines. The headline will list the new warning or advisory only. The first P-VTEC line will use the UPG action code to show the old non-precipitation weather watch is being upgraded. The second P-VTEC line will either use the NEW action code to start the new non-precipitation weather warning or advisory, or use the EXA or EXB action code to extend an existing weather warning or advisory into this geographical area.

5.5.1 Upgrade Watch to Warning Segment Example.

```
MIZ001>003-031100-  
/O.UPG.KMQT.HW.A.0002.040103T0800Z-040103T2300Z/ (P-VTEC line 1)  
/O.NEW.KMQT.HW.W.0003.040103T0800Z-040103T2300Z/ (P-VTEC line 2)  
KEWEENAW-NORTHERN HOUGHTON-ONTONAGON-  
INCLUDING THE CITIES OF...COPPER HARBOR...HOUGHTON...ONTONAGON  
400 PM EST FRI JAN 2 2004
```

...HIGH WIND WARNING IN EFFECT FROM 3 AM TO 6 PM EST SATURDAY...
(Only one headline used - lists active non-precipitation weather warning)

<descriptive text>

\$\$

6. Non-Precipitation Weather Warnings (product category NPW).

6.1 Mission Connection. Non-Precipitation weather warnings provide our users and partners advance notice of hazardous non-precipitation weather events that threaten life or property.

6.2 Issuance Guidelines.

6.2.1 Creation Software. WFOs will use AWIPS GHG as the primary software to create and issue non-precipitation warnings.

6.2.2 Issuance Criteria. WFOs will issue non-precipitation weather warnings when hazardous

non-precipitation weather is imminent, occurring or highly likely over part or all of the forecast area. WFOs should issue a non-precipitation weather warning for the first, second, or occasionally third forecast periods, when there is an 80 percent or greater chance of a hazardous non-precipitation weather event meeting or exceeding local warning criteria.

6.2.2.1 Non-Precipitation Weather Warning Products. WFOs will issue the following non-precipitation weather warning products using the issuance criteria defined in Table 3 for each product:

Warning Product Name	Issuance Criteria
Dust Storm Warning	Widespread or localized blowing dust reducing visibilities to 1/4 mile or less. Sustained winds of 25 mph or greater are usually required.
Excessive Heat Warning	Heat Index values forecast to meet or exceed locally defined warning criteria for at least two days (Typical value: 1) Maximum daytime HI $\geq 105^{\circ}\text{F}$ north to 110°F south 2) Minimum nighttime lows $\geq 75^{\circ}\text{F}$).
Freeze Warning	Minimum shelter temperature is forecast to be 32°F or less during the locally defined growing season.
High Wind Warning	Wind speeds forecast to meet or exceed locally defined warning criteria. (Typical values are sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration).
Inland Hurricane Warning	Tropical cyclone forecast to spread hurricane force winds inland (Sustained wind speeds ≥ 74 mph).
Inland Tropical Storm Warning	Tropical cyclone forecast to spread tropical storm force winds inland (Sustained wind speeds 39 to 73 mph).

Table 3. Non-Precipitation Warning product table.

6.2.3 Issuance Time. A non-precipitation weather warning is an event-driven product and is initially issued when a hazardous non-precipitation weather event is expected to meet or exceed local warning criteria. WFOs should issue updated warnings at least once every six to eight hours until the event ends or is canceled.

6.2.4 Valid Time. A non-precipitation weather warning is valid up to 36 hours after the issuance time. The valid time (event start and end times) is placed in the P-VTEC line(s) and is described in the warning headline. In extreme cases (e.g., long duration excessive heat events), the valid time may exceed 36 hours from the time of issuance.

6.2.5 Product Expiration Time. The product expiration time is generally 6 to 8 hours after the issuance time and should coincide with the next expected update or when the event is forecast to end. The product expiration time is placed in the UGC line.

6.2.6 Event Ending Time. The event ending time is when the hazardous non-precipitation weather event is expected to end. The event ending time can match the product expiration time if the warning is in effect for eight hours or less. The event ending time is placed in the P-VTEC line and is described in the warning headline (e.g., FREEZE WARNING IN EFFECT UNTIL 9 AM EST MONDAY). The event ending time should generally not exceed 36 hours from the time of issuance.

6.3 Technical Description. Non-precipitation weather warnings will follow the format and content described in this section.

6.3.1 Universal Geographic Code Type. Non-precipitation weather warnings will use the (Z) form of the UGC.

6.3.2 Mass News Disseminator Broadcast Instruction Line. Not applicable.

6.3.3 Mass News Disseminator Product Type Line. The non-precipitation weather warning MND line is "URGENT-WEATHER MESSAGE."

6.3.4 Content. The non-precipitation weather warning may contain an overview section, but will include segmented forecast information.

6.3.4.1 Overview Section. The non-precipitation weather warning overview section is optional. If included, it should contain at least one of the following items:

- a. Overview Headline - a general headline statement that summarizes the hazardous weather threat, area affected and expected time of development. The overview headline will begin and end with three periods "...".

Examples:

...A MAJOR HIGH WIND EVENT WILL IMPACT THE PACIFIC
NORTHWEST SATURDAY...

...EXCESSIVE HEAT WARNINGS ISSUED FOR CENTRAL
PENNSYLVANIA TODAY...

- b. Overview - a brief, non-technical description of the developing non-precipitation event. The description may include the location and movement of large scale weather features (e.g., fronts, low pressure systems). The first line of this descriptive information will be preceded by a period ".".

6.3.4.2 Segmented Forecast Information. Each segment of a non-precipitation weather warning will include a warning headline followed by a descriptive text describing why the warning was issued. Each segment describes a specific hazardous non-precipitation weather event(s) for the same geographical area.

a. Warning Headline. The warning headline will include the following elements in the order shown:

- (1) Leading ellipsis (...)
- (2) Valid non-precipitation weather warning product name listed in Table 3.
- (3) Event action phrase defined in Table 4.
- (4) Specific event beginning day and time phrase defined in Appendix C (when applicable)
- (5) Specific event ending day and time phrase defined in Appendix C (when applicable)
- (6) Elevation or area phrase (optional)
- (7) Trailing ellipsis (...)

Exception: When necessary (e.g., mountainous terrain), areal descriptive terms and elevation indicators are permitted after the ending day and time phrase and before the trailing ellipsis.

Generic Warning Headline Format.

- (1) Warning product issuance time prior to event beginning time:
...<warning product name> <event action phrase> FROM <event beginning date and time phrase> TO <event ending date and time phrase>...
- (2) Warning product issuance time equals event beginning time:
...<warning product name> <event action phrase> UNTIL <event ending date and time phrase>...
- (3) Warning product cancellation or expiration statement:
...<warning product name> <event action phrase>...

Event Action Phrase. The event action phrase in the warning headline corresponds with the VTEC action code. Only the following event action phrases in Table 4 will be used in non-precipitation weather warning headlines:

VTEC Action Code	Description	Required Event Action Phrase	Include Time/Date ?
NEW	Initial warning issuance	IN EFFECT	Yes
EXA	Expansion of warning area	IN EFFECT	Yes

EXB	Expansion of warning area and change to warning valid time	IN EFFECT	Yes
CON	Continuation or update of warning	REMAINS IN EFFECT	Yes
EXT	Extend/shorten warning start and/or ending date/time	NOW IN EFFECT	Yes
CAN	Warning cancelled prior to event end time	IS CANCELLED	No
EXP	Advisory approaching the expiration time. Used up to 30 minutes prior to advisory end time.	WILL EXPIRE AT	Yes
	Advisory has expired. Used up to 30 minutes after advisory expiration has passed.	HAS EXPIRED	No
UPG	Upgrade - Not applicable		

Table 4. Event action phrases for NPW warning headlines.

a. Warning Headline Examples:

- (1) Initial issuance or expansion in area:
 ...HIGH WIND WARNING **IN EFFECT** FROM 7 AM THIS MORNING TO 11 AM EST WEDNESDAY...
- (2) Update:
 ...HIGH WIND WARNING **REMAINS IN EFFECT** UNTIL 11 AM EST WEDNESDAY...
- (3) Change to event end time:
 ...HIGH WIND WARNING **NOW IN EFFECT** UNTIL 5 PM EST WEDNESDAY...
- (4) Cancelled prior to event end time/date:
 ...HIGH WIND WARNING **IS CANCELLED**...
- (5) Expiration statement up to 30 minutes prior to event end time:
 ...BLIZZARD WARNING **WILL EXPIRE** AT 5 PM EST WEDNESDAY..
- (6) Expiration statement up to 30 minutes after event end time:
 ...BLIZZARD WARNING **HAS EXPIRED**...

b. Warning descriptive Text. This section will include the following warning information:

- (1) National Weather Service attribution line. For the **initial** warning, include the following phrase to begin the text of a warning:

THE NATIONAL WEATHER SERVICE IN [WFO NAME or LOCATION] HAS ISSUED AN/A (e.g., EXCESSIVE HEAT/FREEZE/HIGH WIND) WARNING.

The attribution line is optional for subsequent issuances.

- (2) Reason warning was issued. Include non-precipitation weather element(s) prompting the warning.
- (3) Quantitative wind speed amounts or Heat Index, etc. (e.g., Northwest winds 35 to 45 mph, Heat Index 110 to 115).
- (4) Definition of a warning when event has not yet begun. Use the following phrase to define a warning:

REMEMBER...A (HIGH WIND/EXCESSIVE HEAT/DUST STORM, etc.) WARNING MEANS HAZARDOUS WEATHER CONDITIONS ARE IMMINENT OR HIGHLY LIKELY.

- (5) Brief CTA statements, safety rules.

c. Order of Segments. Non-precipitation weather warnings are placed second in the order of segments. This order was designed to place the most important and/or time sensitive information near the beginning of the message. The order of segments is:

- (1) Cancellation
- (2) **Warnings**
- (3) Advisories
- (4) Watches

d. Order of Headlines. More than one headline is required in a segment when two or more non-precipitation weather events are forecast to occur for the same UGC or geographical area.

The order of headlines will follow the order of segments.

Examples:

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- (1) Dust Storm Warning and Excessive Heat Watch in effect for the same geographical area.

...DUST STORM WARNING IN EFFECT UNTIL 9 AM EST THIS MORNING...

...EXCESSIVE HEAT WATCH IN EFFECT FROM THURSDAY AFTERNOON THROUGH FRIDAY AFTERNOON...

- (2) High Wind Warning and Wind Advisory in effect for the same mountain zone(s).

...HIGH WIND WARNING IN EFFECT UNTIL 11 AM PST WEDNESDAY ABOVE 3000 FT...

...WIND ADVISORY IN EFFECT UNTIL 11 AM PST WEDNESDAY AT OR BELOW 3000 FT...

6.3.5 Format.

<u>Product Format</u>	<u>Description of Entry</u>
WWaaii cccc ddhhmm NPWxxx	(WMO Heading) (AWIPS ID)
URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE city state time am/pm time_zone day mon dd yyyy	(Product Name or MND) (Issuing Office) (Issuance time/date)
...<Overview headline statement>...	(Optional)
.<General non-precipitation weather synopsis>	(Optional - one to three paragraphs)
stZ001-005>015-ddhhmm- /k.aaa.cccc.pp.s.####.yymmddThhnnZ _B -yymmddThhnnZ _E / zone st-zone st-zone st- INCLUDING THE CITIES OF city...city...city. time am/pm time_zone day mon dd yyyy	(UGC: <u>Z</u> & expiration time) (P-VTEC Line(s)) (Zone Names) (City Names - Optional) (Issuance time/date)
...WARNING HEADLINE...	
<Descriptive Text> {Includes the following information: 1. NWS attribution line (Optional after initial issuance) 2. Why warning was issued (non-precipitation weather element(s) prompting the warning) 3. Detailed wind speed amounts or Heat Index values, etc. (e.g., Northwest winds 35 to 45 mph, heat indices around 115) 4. Timing of the event (beginning, ending, timing of worst conditions, duration) 5. Definition of a warning (before event begins) 6. Potential impact, call to action statement.	(Two to three paragraphs)
\$\$	(UGC Delimiter)
Name/Initials/Forecaster ID	(Optional after last segment)

Figure 2. Generic format for a non-precipitation weather warning.

6.4 Updates, Cancellations, and Corrections. WFOs will update non-precipitation weather warnings at least once every six to eight hours until the event ends or is canceled. WFOs should issue the updated NPW before the product expiration time is reached. The frequent updates will keep our users and partners informed on the current and short term aspects of the hazardous

weather event. Update warnings whenever there is a change in timing, areal extent, or expected conditions.

WFOs will issue a NPW to cancel a warning when the forecaster believes the weather threat has diminished before the valid time expires.

WFOs will issue correction statements for format or grammatical errors as required. To reduce format or grammatical errors, forecasters should proofread the product before transmission.

6.5 Downgrade Warning to Advisory. When a non-precipitation weather warning is downgraded to a non-precipitation weather advisory for the same geographical area, the NPW segment will contain two headlines and two P-VTEC lines. The first headline and P-VTEC line are used to cancel the warning, and the second headline and P-VTEC line is used to issue the new advisory.

6.5.1 Downgrade Warning to Advisory Segment Example.

MIZ001>003-031700-
/O.CAN.KMQT.HW.W.0003.000000T0000Z-040103T2300Z/ (P-VTEC line 1)
/O.NEW.KMQT.WI.Y.0004.040103T0900Z-040103T2300Z/ (P-VTEC line 1)
KEWEENAW-NORTHERN HOUGHTON-ONTONAGON-
INCLUDING THE CITIES OF...COPPER HARBOR...HOUGHTON...ONTONAGON
400 AM EST SAT JAN 3 2004

...HIGH WIND WARNING IS CANCELLED...
...WIND ADVISORY IN EFFECT UNTIL 6 PM EST THIS EVENING...
(Two headlines used - lists cancelled warning, then new advisory)

<descriptive text>

\$\$

6.6 Replace Warning with Warning. When a non-precipitation weather warning is replaced with another warning for the same geographical area, the NPW segment will contain two headlines and two P-VTEC lines. The first headline and P-VTEC line are used to cancel the old warning, and the second headline and P-VTEC line is used to start the new warning.

6.6.1 Replace High Wind Warning with Dust Storm Warning Segment Example.

ORZ045-081200-
/O.CAN.KPDT.HW.W.0004.000000T0000Z-031108T1900Z/ (P-VTEC line 1)
/O.NEW.KPDT.DS.W.0001.031108T0647Z-031108T1900Z/ (P-VTEC line 2)
FOOTHILLS OF THE BLUE MOUNTAINS OR-

INCLUDING THE CITIES OF...PENDLETON...MILTON-FREEWATER...
HEPPNER AND CONDON
1047 PM PST THU NOV 7 2003

...HIGH WIND WARNING IS CANCELLED...

...DUST STORM WARNING IN EFFECT UNTIL 11 AM PST FRIDAY...

(Two headlines used - lists cancelled warning, then new warning)

<descriptive text>

\$\$

7. Non-Precipitation Weather Advisories (product category NPW).

7.1 Mission Connection. Non-precipitation weather advisories provide our users and partners advance notice of hazardous non-precipitation weather events which could lead to life-threatening situations if caution is not exercised.

7.2 Issuance Guidelines.

7.2.1 Creation Software. WFOs will use AWIPS GHG as the primary software to create and issue non-precipitation advisories.

7.2.2 Issuance Criteria. WFOs will issue non-precipitation weather advisories for hazardous non-precipitation weather events that cause significant inconveniences, and if caution is not exercised, could lead to life-threatening situations over part or all of the forecast area. WFOs should issue non-precipitation weather advisories for the first, second, or occasionally third forecast periods, when there is an 80 percent or greater chance of a hazardous non-precipitation weather event meeting or exceeding local advisory criteria.

7.2.2.1 Non-Precipitation Weather Advisory Products. WFOs should issue the following non-precipitation weather advisory products using the issuance criteria defined in Table 5 for each product:

Advisory Product Name	Issuance Criteria
Air Stagnation Advisory	Atmospheric conditions stable enough to cause air pollutants to accumulate in a given area. Criteria developed in conjunction with the local or state EPA and the product issued at their request.
Ashfall Advisory	Airborne ash plume resulting in ongoing deposition at the surface. Ashfall may originate directly from a volcanic eruption or from the resuspension (by wind) of a significant amount of relic ash.
Blowing Dust Advisory	Widespread or localized blowing dust reducing visibilities to one mile or less, but greater than 1/4 mile. Winds of 25 mph or greater are usually required.
Dense Fog Advisory	Widespread or localized fog reducing visibilities to 1/4 mile or less.
Dense Smoke Advisory	Widespread or localized smoke reducing visibilities to 1/4 mile or less.
Freezing Fog Advisory	Very light ice accumulation from freezing fog.
Frost Advisory	Minimum shelter temperature forecast to be 33 to 36°F during the locally defined growing season, on nights with good radiational cooling conditions (e.g., light winds and clear skies).
Heat Advisory	Heat Index values forecast to meet or exceed locally defined advisory criteria for one to two days (Typical value: 1) Maximum daytime HI \geq 100°F north to 105°F south 2) Minimum nighttime lows \geq 75°F).
Lake Wind Advisory	Sustained wind speeds of 20 to 29 mph (or locally defined) lasting for 1 hour or longer for regions which have a significant user community. The need for this product is locally determined.
Wind Advisory	Sustained wind speeds of 30 to 39 mph lasting for 1 hour or longer or locally defined.

Table 5. Non-precipitation advisory product table.

7.2.3 Issuance Time. Advisories are event-driven products and are initially issued when a hazardous non-precipitation weather event is expected to meet or exceed local advisory criteria. WFOs should issue updated advisories at least once every six to eight hours until the event ends or is canceled.

7.2.4 Valid Time. A non-precipitation weather advisory is valid up to 36 hours after the issuance time. The valid time (event start and end times) is placed in the P-VTEC line(s) and is described in the warning headline. In extreme cases (e.g., long duration fog event), the valid time may exceed 36 hours from the time of issuance.

7.2.5 Product Expiration Time. The product expiration time should be 6 to 8 hours after the issuance time and should coincide with the next expected update or when the event is forecast to end. The product expiration time is placed in the UGC line.

7.2.6 Event Ending Time. The event ending time is when the hazardous non-precipitation weather event is expected to end. The event ending time can match the product expiration time if the warning is in effect for eight hours or less. The event ending time is placed in the P-VTEC line and is described in the advisory headline (e.g., FROST ADVISORY IN EFFECT UNTIL 9 AM EST MONDAY). The event ending time should generally not exceed 36 hours from the time of issuance.

7.3 Technical Description. Non-precipitation weather advisories will follow the format and content described in this section.

7.3.1 Universal Geographic Code Type. Non-precipitation weather advisories will use the (Z) form of the UGC.

7.3.2 Mass News Disseminator Broadcast Instruction Line. Not applicable.

7.3.3 Mass News Disseminator Product Type Line. The advisory MND line is “URGENT-WEATHER MESSAGE.”

7.3.4 Content. The non-precipitation weather advisory may contain an overview section, but will include segmented forecast information.

7.3.4.1 Overview Section. The advisory overview section is optional. If included, it should contain at least one of the following items:

- a. Overview Headline - a general headline statement that summarizes the hazardous weather threat, area affected and estimated time of development. The overview headline will begin and end with three periods “...”. For example:

...STRONG GUSTY WINDS WILL IMPACT SOUTHWEST MICHIGAN
TODAY...
...DENSE FOG EXPECTED ACROSS PARTS OF NORTHEAST OHIO
TONIGHT...

- b. Overview - a brief, non-technical description of the developing non-precipitation weather event. The description may include the location and movement of large scale weather features (e.g., fronts, low pressure systems). The first line of this descriptive information will be preceded by a period “.”.

7.3.4.2 Segmented Forecast Information. Each segment of a non-precipitation weather advisory will include the advisory headline followed by a descriptive text describing why the advisory

was issued. Each segment describes a specific hazardous non-precipitation weather event(s) for the same geographical area.

- a. Advisory Headline. The advisory headline will include the following elements in the order shown:

- (1) Leading ellipsis (...)
- (2) Valid non-precipitation weather advisory product name listed in Table 5
- (3) Event action phrase defined in Table 6
- (4) Specific event beginning day and time phrase defined in Appendix C (when applicable)
- (5) Specific event ending day and time phrase defined in Appendix C (when applicable)
- (6) Trailing ellipsis (...)

Exception: When necessary (e.g., mountainous terrain), areal descriptive terms and elevation indicators are permitted after the ending day and time phrase and before the trailing ellipsis.

Generic Advisory Headline Format.

- (1) Advisory product issuance time prior to event beginning time:
...<advisory product name> <event action phrase> FROM <event beginning date and time phrase> TO <event ending date and time phrase>...
- (2) Advisory product issuance time equals event beginning time:
...<advisory product name> <event action phrase> UNTIL <event ending date and time phrase>...
- (3) Advisory product cancellation or expiration statement:
...<advisory product name> <event action phrase>...

Event Action Phrase. The event action phrase in the advisory headline corresponds with the VTEC action code. Only the following event action phrases in Table 6 will be used in non-precipitation weather advisory headlines:

VTEC Action Code	Description	Required Event Action Phrase	Include Time/Date ?
NEW	Initial advisory issuance	IN EFFECT	Yes
EXA	Expansion of advisory area	IN EFFECT	Yes
EXB	Expansion of advisory area and change to advisory valid time	IN EFFECT	Yes
CON	Continuation or update of advisory	REMAINS IN EFFECT	Yes
EXT	Extend/shorten advisory start and/or ending date/time	NOW IN EFFECT	Yes
CAN	Advisory cancelled prior to event end time	IS CANCELLED	No
EXP	Advisory approaching the expiration time. Used up to 30 minutes prior to advisory end time.	WILL EXPIRE AT	Yes
	Advisory has expired. Used up to 30 minutes after advisory expiration has passed.	HAS EXPIRED	No
UPG	Upgrade to warning - no headline		

Table 6. Event action phrases for NPW advisory headlines.

a. Advisory Headline Examples:

- (1) Initial issuance or expansion in area:
...WIND ADVISORY **IN EFFECT** FROM 7 AM THIS MORNING TO 11 AM EST WEDNESDAY...
- (2) Update:
...WIND ADVISORY **REMAINS IN EFFECT** UNTIL 11 AM EST WEDNESDAY...
- (3) Extend event end time:
...WIND ADVISORY **NOW IN EFFECT** UNTIL 5 PM EST WEDNESDAY...
- (4) Cancelled prior to event end time/date:
...WIND ADVISORY **IS CANCELLED**...
- (5) Expiration statement up to 30 minutes prior to event end time:
...WIND ADVISORY **WILL EXPIRE AT** 5 PM EST WEDNESDAY..

- (6) Expiration statement up to 30 minutes after event end time:
...WIND ADVISORY HAS EXPIRED...

b. Advisory descriptive Text. This section will include the following advisory information:

- (1) National Weather Service attribution line. For the **initial** advisory, include the following phrase to begin the text of the advisory:

THE NATIONAL WEATHER SERVICE IN [WFO NAME or LOCATION] HAS ISSUED A (e.g., HEAT/FROST/WIND) ADVISORY.

The attribution line is optional for subsequent issuances.

- (2) Reason advisory was issued. Include non-precipitation weather element(s) prompting the advisory.
- (3) Quantitative wind speed amounts or Heat Index values, etc. (e.g., Northwest winds 25 to 35 mph, Heat Index 100 to 105).
- (4) Brief call to action statements, safety rules.

c. Order of Segments. Advisories are placed third in the order of segments. This order was designed to place the most important and/or time sensitive information near the beginning of the message. The order of segments is:

- (1) Cancellation
(2) Warnings
(3) **Advisories**
(4) Watches

d. Order of Headlines. More than one headline is required in a segment when two or more non-precipitation weather events are forecast to occur for the same UGC or geographical area.

The order of headlines will follow the order of segments.

Examples:

- (1) Dense Fog Advisory and Excessive Heat Watch in effect for the same geographical area.

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...DENSE FOG ADVISORY IN EFFECT UNTIL 9 AM EST THIS MORNING...
...EXCESSIVE HEAT WATCH IN EFFECT FROM THURSDAY
AFTERNOON TO FRIDAY AFTERNOON...

- (2) High Wind Warning and Wind Advisory in effect for the same mountain zone(s).

...HIGH WIND WARNING IN EFFECT UNTIL 11 AM PST WEDNESDAY
ABOVE 3000 FT...
...WIND ADVISORY IN EFFECT UNTIL 11 AM PST WEDNESDAY AT OR
BELOW 3000 FT...

7.3.5 Format.

<u>Product Format</u>	<u>Description of Entry</u>
WWaaii cccc ddhhmm NPWxxx	(WMO Heading) (AWIPS ID)
URGENT - WEATHER MESSAGE NATIONAL WEATHER SERVICE city state time am/pm time_zone day mon dd yyyy	(Product Name or MND) (Issuing Office) (Issuance time/date)
...<Overview headline statement>...	(Optional)
.<General non-precipitation weather synopsis>	(Optional - one to three paragraphs)
stZ001-005>015-ddhhmm- /k.aaa.cccc.pp.s.####.yymmddThhnnZ _B -yymmddThhnnZ _E / zone st-zone st-zone st- INCLUDING THE CITIES OF city...city...city. time am/pm time_zone day mon dd yyyy	(UGC: <u>Z</u> & expiration time) (P-VTEC Line(s)) (Zone Names) (City Names - Optional) (Issuance time/date)
...ADVISORY HEADLINE...	
<Descriptive text> { Includes the following information: 1. NWS attribution line (Optional after initial issuance) 2. Why advisory was issued (non-precipitation weather element(s) prompting the advisory) 3. Detailed wind speed amounts or Heat Index values, etc. (e.g., Northwest winds 25 to 35 mph, heat indices around 105) 4. Timing of the event (beginning, ending, timing of worst conditions, duration) 5. Potential impact, call to action statements }	(Two to three paragraphs)
\$\$	(UGC Delimiter)
Name/Initials/Forecaster ID	(Optional after last segment)

Figure 3. Generic format for a non-precipitation weather advisory.

7.4 Updates, Amendments, and Corrections. WFOs will update advisories at least once every six to eight hours until the event ends or is canceled. WFOs should issue the updated NPW before the product expiration time is reached. The frequent updates will keep our users and partners informed on the current and short term aspects of the non-precipitation weather event. Update advisories whenever there is a change in timing, areal extent, or expected

conditions. WFOs will issue a NPW to cancel an advisory when the forecaster believes the weather threat has diminished before the valid time expires.

WFOs will issue correction statements for format or grammatical errors as required. To reduce format or grammatical errors, forecasters should proofread the product before transmission.

7.5 Upgrade Advisory to Warning. When a non-precipitation weather advisory is upgraded to a non-precipitation weather warning for the same geographical area, the NPW segment will contain one headline and two P-VTEC lines. The headline will list the new warning only. The first P-VTEC line will use the UPG action code to show the old advisory is being upgraded. The second P-VTEC line will either use the NEW action code to start the new advisory, or use the EXA or EXB action code to extend an existing advisory into this geographical area.

7.5.1 Upgrade Advisory to Warning Segment Example.

OKZ006>008-011>024-033>036-TXZ083-221600-

/O.UPG.KOKC.HT.Y.0004.000000T0000Z-030622T2300Z/ (P-VTEC line 1)

/O.NEW.KOKC.EH.W.0003.030622T0900Z-030623T2300Z/ (P-VTEC line 2)

ALFALFA OK-BECKHAM OK-BLAINE OK-CADDO OK-CANADIAN OK-CUSTER OK-DEWEY OK-GARFIELD OK-GRANT OK-GREER OK-HARDEMAN TX-HARMON OK-JACKSON OK- KAY OK-KINGFISHER OK- KIOWA OK- LOGAN OK-MAJOR OK-NOBLE OK-PAYNE OK-ROGER MILLS OK-WASHITA OK-

INCLUDING THE CITIES OF....ALTUS OK...CLINTON/WEATHERFORD OK...ELK CITY OK...EL RENO OK...ENID OK...GUTHRIE OK...HOBART OK...PONCA CITY OK...STILLWATER OK

4 AM CDT SUN JUN 22 2003

...EXCESSIVE HEAT WARNING IN EFFECT UNTIL 6 PM CDT MONDAY...

(One headline used - lists new warning only)

<descriptive text>

\$\$

7.6 Replace Advisory with Advisory. When a non-precipitation weather advisory is replaced with another advisory for the same geographical area, the NPW segment will contain two headlines and two P-VTEC lines. The first headline and P-VTEC line is used to cancel the old advisory, and the second headline and P-VTEC line is used to start the new advisory.

7.6.1 Replace Wind Advisory with Blowing Dust Advisory Segment Example.

ORZ045-081200-

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/O.CAN.KPDT.WI.Y.0011.000000T0000Z-031108T1900Z/ (P-VTEC line 1)

/O.NEW.KPDT.DU.Y.0007.031108T0647Z-031108T1900Z/ (P-VTEC line 2)

FOOTHILLS OF THE BLUE MOUNTAINS OR-
INCLUDING THE CITIES OF...PENDLETON...MILTON-FREEWATER...
HEPPNER AND CONDON
1047 PM PST THU NOV 7 2003

...WIND ADVISORY IS CANCELLED...

...BLOWING DUST ADVISORY IN EFFECT UNTIL 11 AM PST FRIDAY...

(Two headlines used - lists cancelled advisory, then new advisory)

<descriptive text>

\$\$

APPENDIX A - Non-Precipitation Weather Product Examples

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1. Introduction. This section contains guidelines and examples of non-precipitation weather products.
2. Non-Precipitation Weather Watch Examples.
 - 2.1 Freeze Watch. An example of a Freeze Watch, first issuance. NWS attribution line is mandatory.

WWUS74 KMOB 171100
NPWMOB

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE MOBILE AL
500 AM CST SUN NOV 17 2002

...A FREEZE WATCH IS IN EFFECT TONIGHT FOR THE INLAND AREAS OF
SOUTHEAST MISSISSIPPI...AS WELL AS FOR PORTIONS OF INTERIOR SOUTHWEST
AND SOUTH CENTRAL ALABAMA...

.A COLD AND DRY AIRMASS CONTINUES TO FILTER INTO SOUTH MISSISSIPPI
AND ALABAMA. AS HIGH PRESSURE SETTLES JUST SOUTH OF THE REGION
TODAY AND TONIGHT...WINDS WILL BECOME LIGHT AND TEMPERATURES WILL
FALL INTO THE 30S BY LATE EVENING FOR MANY INLAND AREAS. BY
DAYBREAK MONDAY...READINGS IN THE LOWER 30S WILL BE POSSIBLE FOR
MANY INLAND AREAS.

ALZ051>060-MSZ067-075-076-172300-
/O.NEW.KMOB.FZ.A.0002.021118T0900Z-021118T1400Z/
BUTLER-CHOCTAW-CLARKE-CONECUH-COVINGTON-CRENSHAW-ESCAMBIA-
GREENE-MONROE-PERRY-WASHINGTON-WAYNE-WILCOX-
INCLUDING THE CITIES OF...ANDALUSIA...BREWTON...BUTLER...CAMDEN...
CHATOM...EVERGREEN...GREENVILLE...GROVE HILL...LEAKESVILLE...
LUVERNE...MONROEVILLE...NEW AUGUSTA...WAYNESBORO
500 AM CST SUN NOV 17 2002

...A FREEZE WATCH IS IN EFFECT LATE TONIGHT TO MONDAY MORNING...

THE NATIONAL WEATHER SERVICE IN MOBILE HAS ISSUED A FREEZE WATCH.
TEMPERATURES LATE TONIGHT AND EARLY MONDAY MORNING ARE EXPECTED
TO FALL INTO THE LOWER 30S FOR MANY INLAND AREAS...RESULTING IN THE
POTENTIAL OF A LIGHT FREEZE.

REMEMBER...A FREEZE WATCH MEANS CONDITIONS ARE FAVORABLE FOR A
HAZARDOUS FREEZE EVENT IN AND CLOSE TO THE WATCH AREA.

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PRECAUTIONS SHOULD BE TAKEN TODAY TO PROTECT TENDER OUTDOOR PLANTS AND OUTDOOR PETS FROM THE EXPECTED OVERNIGHT COLD TEMPERATURES.

\$\$

2.2 High Wind Watch. An example of a High Wind Watch, first issuance. NWS attribution line is mandatory.

WWUS45 KSGX 011200
NPWSGX

URGENT-WEATHER MESSAGE
NATIONAL WEATHER SERVICE SAN DIEGO CA
400 AM PST FRI MAR 1 2002

...HIGH WIND WATCH FOR THE INLAND EMPIRE OF EXTREME SOUTHWESTERN CALIFORNIA SATURDAY THROUGH NOON SUNDAY...

.A STRONG OFFSHORE FLOW WILL DEVELOP TONIGHT AND STRENGTHEN SATURDAY. IT WILL CONTINUE INTO SUNDAY MORNING. LOCAL STRONG GUSTY NORTHEAST WINDS ARE EXPECTED THROUGH AND BELOW MOUNTAIN CANYONS AND PASSES DURING THIS PERIOD.

CAZ048-049-020000-
/O.NEW.KSGX.HW.A.0004.020302T1100Z-020303T1300Z/
SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
400 AM PST FRI MAR 1 2002

...HIGH WIND WATCH IN EFFECT FROM SATURDAY MORNING TO SUNDAY MORNING...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A HIGH WIND WATCH. LOCAL NORTHEAST WINDS UP TO 40 MPH WITH GUSTS TO OVER 60 MPH ARE POSSIBLE SATURDAY THROUGH SUNDAY MORNING... BEFORE DECREASING SUNDAY AFTERNOON.

REMEMBER...A HIGH WIND WATCH MEANS CONDITIONS ARE FAVORABLE FOR A HAZARDOUS HIGH WIND EVENT IN AND CLOSE TO THE WATCH AREA.

THE WINDS COULD MAKE DRIVING DIFFICULT FOR MOTORISTS WITH HIGH PROFILE VEHICLES OR TRAILERS.

\$\$

3. Non-Precipitation Weather Warning Examples.

3.1 Freeze Warning. An example of a Freeze Warning, first issuance. NWS attribution line is mandatory.

WWUS74 KBMX 171000
NPWBMX

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE BIRMINGHAM AL
400 AM CST SUN NOV 17 2002

...FREEZE WARNING TONIGHT FOR ALL OF NORTH AND CENTRAL ALABAMA...

.A TASTE OF WINTER HAS COME TO ALABAMA. A STRONG COLD FRONT BROUGHT THE FIRST REAL ARCTIC AIRMASS OF THE SEASON INTO ALABAMA. AS THE COLD AIR CONTINUES TO SETTLE OVER THE STATE...CLEARING SKIES AND DIMINISHING WINDS TONIGHT WILL SET THE STAGE FOR THE COLDEST NIGHT OF THE SEASON. LOWS TONIGHT WILL FALL INTO THE MIDDLE AND UPPER 20S ACROSS NORTH ALABAMA AND NEAR 30 ACROSS CENTRAL ALABAMA.

ALZ001>029-034-171800-
/O.NEW.KBMX.FZ.W.0004.021118T0700Z-021118T1600Z/
BIBB-BLOUNT-CALHOUN-CHEROKEE-CLAY-CLEBURNE-COLBERT-CULLMAN-
DEKALB-ETOWAH-FAYETTE-FRANKLIN-JACKSON-JEFFERSON-LAMAR-
LAUDERDALE-LAWRENCE-LIMESTONE-MADISON-MARION-MARSHALL-MORGAN-
PICKENS-RANDOLPH-SHELBY-ST CLAIR-TALLADEGA-TUSCALOOSA- WALKER-
WINSTON-
400 AM CST SUN NOV 17 2002

...FREEZE WARNING IN EFFECT FROM 1 AM TO 10 AM CST MONDAY...

THE NATIONAL WEATHER SERVICE IN BIRMINGHAM HAS ISSUED A FREEZE WARNING. CLEAR SKIES AND DIMINISHING WINDS ARE EXPECTED TONIGHT. THIS WILL ALLOW TEMPERATURES TO FALL BELOW FREEZING...PRODUCING THE FIRST WIDESPREAD FREEZE. LOWS TONIGHT WILL FALL INTO THE MIDDLE AND UPPER 20S ACROSS THE AREA.

REMEMBER...A FREEZE WARNING MEANS HAZARDOUS WEATHER CONDITIONS ARE IMMINENT OR HIGHLY LIKELY.

THOSE WITH COLD SENSITIVE PLANTS OR ANIMALS...OR OTHER CONCERNS

NWSI 10-515 NOVEMBER 1, 2005

RELATED TO FREEZING TEMPERATURES...SHOULD BEGIN PREPARATIONS NOW FOR THIS FREEZE. IF YOU HAVE NOT ALREADY DONE SO...NOW IS THE TIME TO MAKE SURE HEATERS ARE IN PROPER WORKING ORDER.

\$\$

ALZ030>033-035>050-171800-
/O.NEW.KBMX.FZ.W.0005.021118T0900Z-021118T1500Z/
AUTAUGA-BARBOUR-BULLOCK-CHAMBERS-CHILTON-COOSA-DALLAS-ELMORE-
GREENE-HALE-LEE-LOWNDES-MACON-MARENGO-MONTGOMERY-PERRY-PIKE-
RUSSELL-SUMTER-TALLAPOOSA-
400 AM CST SUN NOV 17 2002

...FREEZE WARNING IN EFFECT FROM 3 AM TO 9 AM CST MONDAY...

THE NATIONAL WEATHER SERVICE IN BIRMINGHAM HAS ISSUED A FREEZE WARNING. CLEAR SKIES AND DIMINISHING WINDS ARE EXPECTED TONIGHT. THIS WILL ALLOW TEMPERATURES TO FALL BELOW FREEZING...PRODUCING THE FIRST WIDESPREAD FREEZE. LOWS TONIGHT WILL FALL TO NEAR 30 ACROSS THE AREA.

REMEMBER...A FREEZE WARNING MEANS HAZARDOUS WEATHER CONDITIONS ARE IMMINENT OR HIGHLY LIKELY.

THOSE WITH COLD SENSITIVE PLANTS OR ANIMALS...OR OTHER CONCERNS RELATED TO FREEZING TEMPERATURES...SHOULD BEGIN PREPARATIONS NOW FOR THIS FREEZE. IF YOU HAVE NOT ALREADY DONE SO...NOW IS THE TIME TO MAKE SURE HEATERS ARE IN PROPER WORKING ORDER.

\$\$

3.2 High Wind Warning. An example of an updated High Wind Warning, second issuance. This example includes the optional NWS attribution line.

WWUS74 KTSA 070309
NPWTUL

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE TULSA OK
1009 PM CDT FRI APR 6 2001

OKZ054>056-059>061-064>066-071000-
/O.CON.KTSA.HW.W.0003.000000T0000Z-010407T1200Z/

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CREEK OK-NOWATA OK-OKFUSKEE OK-OKMULGEE OK-OSAGE OK-PAWNEE
OK-ROGERS OK-TULSA OK-WASHINGTON OK-
INCLUDING THE CITIES OF...NOWATA...CLAREMORE...OKEMAH...OKMULGEE...
PAWHUSKA...TULSA...SAND SPRINGS...BROKEN ARROW...BARTLESVILLE...
PAWNEE AND BRISTOW
1009 PM CDT FRI APR 6 2001

...HIGH WIND WARNING IN EFFECT UNTIL 7 AM CDT SATURDAY...

THE NATIONAL WEATHER SERVICE IN TULSA HAS CONTINUED THE HIGH WIND
WARNING. GUSTY SOUTH TO SOUTHWEST WINDS OF 50 TO 60 MPH WILL
CONTINUE ACROSS THE WARNED AREA. WINDS WILL BE STRONGEST WITH THE
APPROACH OF A LINE OF WEAKENING SHOWERS NEARING WESTERN OSAGE AND
PAWNEE COUNTIES AT 1000 PM.

MOTORISTS SHOULD EXERCISE CAUTION WHILE DRIVING TONIGHT. BE ALERT
TO SUDDEN GUSTS OF WIND WHICH MAY CAUSE YOU TO LOSE CONTROL OF
YOUR VEHICLE. EXTRA ATTENTION SHOULD BE GIVEN TO CROSS WINDS WHEN
DRIVING ON EAST-WEST ROADS...AND ON BRIDGES AND OVERPASSES.

TAKE ACTION TO SECURE TRASH CANS...LAWN FURNITURE...AND OTHER LOOSE
OUTDOOR OBJECTS. THE HIGH WINDS MAY TOPPLE TREES...DOWN POWER LINES
AND DAMAGE SOME STRUCTURES.

STAY TUNED TO NOAA WEATHER RADIO ALL HAZARDS...COMMERCIAL RADIO
OR TELEVISION FOR THE LATEST INFORMATION CONCERNING THIS HIGH WIND
EVENT. ADDITIONAL WEATHER INFORMATION CAN ALSO BE OBTAINED ON OUR
WEB SITE AT... WWW.SRH.NOAA.GOV/TULSA.

\$\$

4. Non-Precipitation Weather Advisory Examples.

4.1 Blowing Dust Advisory. An example of a Blowing Dust Advisory, first issuance.
The NWS attribution line is mandatory.

WWUS76 KPDT 080637
NPWPDT

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PENDLETON OR
1037 PM PST THU NOV 7 2002

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ORZ045-081200-
/O.NEW.KPDT.DU.Y.0006.021108T0700Z-021108T1300Z/
FOOTHILLS OF THE BLUE MOUNTAINS OR-
INCLUDING THE CITIES OF...PENDLETON...MILTON-FREEWATER...
HEPPNER AND CONDON
1047 PM PST THU NOV 7 2002

...BLOWING DUST ADVISORY IN EFFECT UNTIL 5 AM PST FRIDAY...

THE NATIONAL WEATHER SERVICE IN PENDLETON HAS ISSUED A BLOWING
DUST ADVISORY. SOUTHERLY WINDS OF 20 TO 30 MPH WITH HIGHER GUSTS ARE
PRODUCING BLOWING DUST IN THE FOOTHILLS OF THE BLUE MOUNTAINS...
REDUCING VISIBILITY TO LESS THAN 1 MILE.

MOTORISTS ARE URGED TO EXERCISE EXTREME CAUTION ON AREA HIGHWAYS.
THE BLOWING DUST WILL SUBSIDE LATE TONIGHT AS A COLD FRONT BRINGS
RAIN INTO THE FOOTHILLS.

\$\$

POLAN

4.2 Dense Fog Advisory. An example of a Dense Fog Advisory, first issuance. NWS
attribution line is mandatory.

WWUS74 KLCH 132115
NPWLCH

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE LAKE CHARLES LA
315 PM CST TUE FEB 13 2001

...DENSE FOG EXPECTED TONIGHT...

.A LONG FETCH OF WARM AND MOIST SOUTHERLY WINDS FROM THE CENTRAL
GULF OF MEXICO WILL MOVE OVER COOL NEAR SHORE WATERS...PRODUCING
DENSE SEA FOG NEAR THE COAST LATE THIS AFTERNOON. THE DENSE FOG
WILL SPREAD INLAND THIS EVENING...EVENTUALLY REACHING INTERIOR
SOUTHEAST TEXAS AND CENTRAL LOUISIANA BEFORE MIDNIGHT.

LAZ027>033-041>045-051>055-TXZ180>182-201-215-216-140300-
/O.NEW.KLCH.FG.Y.0010.010213T0500Z-010214T1600Z/

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ACADIA-ALLEN-AVOYELLES-BEAUREGARD-CALCASIEU-CAMERON-EVANGELINE
-
HARDIN-IBERIA-JASPER-JEFFERSON-JEFFERSON DAVIS- LAFAYETTE-
LOWER ST MARTIN-NEWTON-ORANGE-RAPIDES-ST LANDRY-ST MARY-
TYLER-UPPER ST MARTIN-VERMILION-VERNON-
315 PM CST TUE FEB 13 2001

...DENSE FOG ADVISORY IN EFFECT FROM 11 PM THIS EVENING TO 10 AM CST
WEDNESDAY...

THE NATIONAL WEATHER SERVICE IN LAKE CHARLES HAS ISSUED A DENSE FOG
ADVISORY. DENSE FOG WILL DEVELOP AFTER 10 PM THIS EVENING...REDUCING
VISIBILITIES TO NEAR ZERO. THE FOG WILL DISSIPATE BY 11 AM WEDNESDAY
MORNING.

MOTORISTS SHOULD DRIVE WITH EXTREME CAUTION AND ALLOW ADDITIONAL
TRAVEL TIME. USE LOW BEAM HEADLIGHTS AND REDUCE DRIVING SPEEDS.

\$\$

SWEENEY

4.3 Lake Wind Advisory. An example of a Lake Wind Advisory, second issuance. This
example does not include the optional NWS attribution line for product updates.

WWUS45 KMSO 282200
NPWMSO

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE MISSOULA MT
400 PM MDT MON APR 28 2003

MTZ001-003-290500-
/O.CON.KMSO.LW.Y.0013.000000T0000Z-030429T0500Z/
KOOTENAI/CABINET REGION-FLATHEAD/MISSION VALLEYS-
INCLUDING...KALISPELL...POLSON...ST. IGNATIUS...LIBBY...EUREKA
400 PM MDT MON APR 28 2003

...LAKE WIND ADVISORY IN EFFECT UNTIL 11 PM MDT THIS EVENING...

STRONG NORTH TO NORTHEAST WINDS OF 25 MPH WITH GUSTS TO 35 MPH OR
GREATER WILL CONTINUE OVER NORTHWEST MONTANA LAKES THROUGH THIS
EVENING.

NWSI 10-515 NOVEMBER 1, 2005

BOATERS WILL ENCOUNTER ROUGH CONDITIONS ON LAKES DURING THIS PERIOD. LAKES OF SPECIAL CONCERN FOR THESE CONDITIONS ARE FLATHEAD LAKE AND LAKE KOOCANUSA. WINDS WILL SLOWLY DIMINISH OVERNIGHT TONIGHT.

\$\$

WRIGHT

4.4 Wind Advisory. An example of a Wind Advisory, first issuance. NWS attribution line is mandatory.

WWUS74 KFWD 040946
NPWFWD

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE FORT WORTH TX
446 AM CDT SUN MAY 4 2003

...WIND ADVISORY FOR ALL OF NORTH TEXAS THROUGH 8 PM THIS EVENING...

.A STRONG PRESSURE GRADIENT ACROSS THE SOUTHER PLAINS WILL RESULT IN SOUTHERLY WINDS OF 20 TO 30 MPH AND HIGHER GUSTS TO 35 MPH ACROSS NORTH TEXAS BEGINNING THIS MORNING AND CONTINUING UNTIL 800 PM THIS EVENING.

TXZ091>095-100>107-115>123-129>135-141>148-156>162-174-175-041600-
/O.NEW.KFWD.WI.Y.0010.030504T0946Z-030505T0100Z/
ANDERSON-BELL-BOSQUE-COLLIN-COMANCHE-COOKE-CORYELL-DALLAS-
DELTA-DENTON-EASTLAND-ELLIS-ERATH-FALLS-FANNIN-FREESTONE-GRAYSON-
HAMILTON-HENDERSON-HILL-HOOD-HOPKINS-HUNT-JACK-JOHNSON-KAUFMAN-
LAMAR-LAMPASAS-LEON-LIMESTONE-MCLENNAN-MILAM-MILLS-MONTAGUE-N
AVARRO-PALO PINTO- PARKER-RAINS-ROBERTSON-ROCKWALL-SOMERVELL-
STEPHENS-TARRANT-VAN ZANDT-WISE-YOUNG-
5 AM CDT SUN MAY 4 2003

...WIND ADVISORY IN EFFECT UNTIL 8 PM CDT THIS EVENING...

THE NATIONAL WEATHER SERVICE IN FORT WORTH HAS ISSUED A WIND ADVISORY. STRONG SOUTHERLY WINDS OF 20 TO 30 MPH WITH HIGHER GUSTS TO 35 MPH ARE EXPECTED THROUGHOUT NORTH TEXAS THIS MORNING THROUGH 800 PM THIS EVENING. THIS ADVISORY MAY BE EXTENDED INTO TONIGHT IF AREA WINDS ARE EXPECTED TO REMAIN STRONG MOST OF THE NIGHT.

NWSI 10-515 NOVEMBER 1, 2005

A WIND ADVISORY IS ISSUED WHEN SUSTAINED WINDS ARE FORECAST TO BE 20 TO 30 MPH. WINDS OF THESE MAGNITUDES MAY CAUSE MINOR PROPERTY DAMAGE WITHOUT EXTRA PRECAUTIONS. MOTORISTS IN HIGH PROFILE VEHICLES SHOULD USE CAUTION DRIVING ON WEST TO EAST ROADS.

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5. Cancellation Product Examples.

5.1 Cancelled Wind Advisory. An example of a canceled Wind Advisory.

WWUS74 KCRP 161946
NPWCRP

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE CORPUS CHRISTI TX
245 PM CDT FRI MAY 16 2003

TXZ231>234-241>244-246-247-162030-
/O.CAN.KCRP.WI.Y.0012.000000T0000Z-030516T2300Z/
BEE-CALHOUN-GOLIAD-JIM WELLS-KLEBERG-LIVE OAK-NUECES-REFUGIO-
SAN PATRICIO-VICTORIA-
INCLUDING THE CITIES OF...VICTORIA...THREE RIVERS...SKIDMORE...
SINTON...SEADRIFT...ROBSTOWN...REFUGIO...PORTLAND...PORT OCONNOR...
PORT LAVACA...PORT ARANSAS...MATHIS...KINGSVILLE...INGLESIDE...
GOLIAD...GEORGE WEST...CORPUS CHRISTI...BEEVILLE...
ARANSAS PASS AND ALICE
245 PM CDT FRI MAY 16 2003

...WIND ADVISORY IS CANCELLED...

MAXIMUM WIND SPEEDS OVER THE COASTAL BEND HAVE DECREASED TO 15 TO 25 MPH. WIND GUSTS TO 30 MPH MAY OCCUR OVER PORTIONS OF THE COASTAL BEND THROUGH THE EARLY EVENING HOURS. SINCE THESE WIND CONDITIONS ARE BELOW WIND ADVISORY CRITERION...THE WIND ADVISORY HAS BEEN CANCELLED.

\$\$

WC

5.2 Canceled Dense Fog Advisory. An example of a canceled Dense Fog Advisory.

WWUS74 KEWX 051301
NPWEWX

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE AUSTIN/SAN ANTONIO TX
700 AM CST SAT APR 5 2003

TXZ173-191-192-204>208-051324-
/CAN.KEWX.FG.Y.0015.000000T0000Z-030405T1600Z/
BEXAR-CALDWELL-COMAL-GUADALUPE-HAYS-MEDINA-TRAVIS-WILLIAMSON-
700 AM CST SAT APR 5 2003

...DENSE FOG ADVISORY IS CANCELLED...

VISIBILITIES EARLY THIS MORNING HAVE IMPROVED ABOVE DENSE FOG
ADVISORY CRITERIA AND ARE NOT EXPECTED TO RETURN AS DAYTIME MIXING
OF DRIER AIR FROM ALOFT ENSUES. THEREFORE THE DENSE FOG ADVISORY
ISSUED EARLIER THIS MORNING HAS BEEN CANCELLED.

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APPENDIX B - Non-Precipitation Weather Definitions

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1. Introduction. This section contains definitions of non-precipitation weather elements used in non-precipitation weather products.
2. Hazardous Non-Precipitation Weather. A non-precipitation weather event that endangers life or property, provides an impediment to commerce, or if proper precaution is not taken, can become life threatening.
3. Hazardous Non-Precipitation Weather Phenomena Definitions.
 - 3.1 Excessive Heat. Excessive heat results from a combination of high temperatures (significantly above normal) and high humidities. At certain levels, the human body cannot maintain proper internal temperatures and may experience heat related illness. The "Heat Index" (HI) (Figure B-1) is a measure of the effect of the combined elements on the body.

		Relative Humidity (%)																		
		10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Air Temperature (°F)	130	131																		
	125	123	131	141																
	120	116	123	130	139	148														
	115	111	115	120	127	135	143	151												
	110	105	106	112	117	123	130	137	143	150										
	105	100	102	105	109	113	118	123	129	135	142	149								
	100	95	97	99	101	104	107	110	115	120	126	132	138	144						
	95	90	91	93	94	96	98	101	104	107	110	114	119	124	130	136				
	90	85	86	87	88	90	91	93	95	96	98	100	102	106	109	113	117	122		
	85	80	81	82	83	84	85	86	87	88	89	90	91	93	95	97	99	102	105	106
	80	75	76	77	77	78	79	79	80	81	81	82	83	85	86	86	87	88	89	91
	75	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80
	70	65	65	66	66	67	67	68	68	69	69	70	70	70	70	71	71	71	71	72

Figure B-1. Heat Index Chart.

3.1.1 Heat Index Calculation. The computation used for the heat index is a refinement of a result obtained by multiple regression analysis carried out by Lans P. Rothfus and described in a 1990 National Weather Service (NWS) Technical Attachment (SR 90-23). The regression equation of Rothfus is:

$$HI = -42.379 + 2.04901523*T + 10.14333127*RH - .22475541*T*RH - .00683783*T^2 - .05481717*RH^2 + .00122874*T^2*RH + .00085282*T*RH^2 - .00000199*T^2*RH^2$$

where, T is temperature in degrees Fahrenheit

RH is relative humidity in percent.

HI is the heat index expressed as an apparent temperature in degrees Fahrenheit.

3.1.1.1 Heat Index Calculation Adjustment for Low Humidity. If the RH is less than 13% and the temperature is between 80 and 112 degrees F, then the following adjustment is **subtracted** from HI:

$$ADJUSTMENT = [(13-RH)/4]*SQRT\{[17-ABS(T-95.)]/17\}$$

where, ABS and SQRT are the absolute value and square root functions, respectively.

3.1.1.2 Heat Index Calculation Adjustment for High Humidity and mild Temperatures. If the RH is greater than 85% and the temperature is between 80 and 87 degrees F, then the following adjustment is **added** to HI:

$$ADJUSTMENT = [(RH-85)/10] * [(87-T)/5]$$

3.2 Freeze/Frost Terms.

3.2.1 Freeze. A freeze occurs when the surface air temperature is 32°F or below over a widespread area for a climatologically significant period of time (greater than one hour). Use of the term is usually restricted to advective situations or to occasions when wind or other conditions prevent frost. Adjectives, such as "killing," "severe," or "hard," should be used when appropriate. "Killing" may be used during the growing season when the temperature is expected to be low enough for a sufficient duration to kill all but the hardiest herbaceous crops.

3.2.2 Frost. Frost describes the formation of thin ice crystals on the ground or other surfaces in the form of scales, needles, feathers, or fans. Frost develops under conditions similar to dew, except the temperatures of the Earth's surface and earthbound objects fall below 32°F. As with the term "freeze," this condition is primarily significant during the growing season. If a frost period is sufficiently severe to end the growing season or delay its beginning, it is commonly referred to as a "killing frost." Because frost is primarily an event that occurs as the result of radiational cooling, it frequently occurs with a thermometer level temperature in the mid-30s.

3.3 High Winds. High winds exclude those directly associated with severe local storms, hurricanes, and winter storms and require a warning when the following occur:

- a. sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or
- b. winds of 58 mph or greater for any duration (or otherwise locally defined).

An advisory is appropriate for sustained winds of 30 mph or greater.

The threshold for warnings and advisories should be increased at higher elevations because of the lower air density and subsequent reduction in damage from less force. The regions may adjust these values to account for local climatology and other considerations.

3.3.1 Channeled High Winds. In mountainous areas or in cities with tall buildings, air may be channeled through constricted passages producing high winds. Santa Ana winds and winds through passes from the cold Alaskan interior to the sea are examples of these winds. Channeled high winds are local in nature but can be extremely strong. These winds generally occur in well-defined areas.

3.3.2 Chinook or Foehn Wind. These are warm, dry winds that occur in the lee of high mountain ranges. It is a fairly common wintertime phenomenon in the mountainous west and in parts of Alaska. These winds develop in well-defined areas and can be quite strong.

3.3.3 Gradient High Winds. These high winds usually cover a large area and are due to synoptic-scale, extra-tropical low pressure systems.

3.3.4 Mesoscale High Winds. These high winds usually follow the passage of organized convective systems and are associated with wake depressions or strong mesohighs. These winds are separated from the main convection where it would be awkward to cover them using convective warnings as defined in Instruction 10-511.

3.3.5 Trade Winds. The wind system, occupying most of the Tropics, that blows from the subtropical highs toward the equatorial trough.

3.3.6 Tropical Cyclone Associated High Winds. A landfalling tropical cyclone can produce high winds a few hundred miles or so inland from the coast. Areas near the coast are covered with hurricane or tropical storm warnings. However, hurricane and tropical storm warnings are not appropriate for inland areas since they are perceived to be associated with a marine environment and include storm surge dangers. Therefore, tropical cyclone produced winds over inland areas are addressed by procedures with this instruction.

3.4 Obstructions to Visibility.

3.4.1 Blowing Dust or Sand. Strong winds over dry ground, that has little or no vegetation,

can lift particles of dust or sand into the air. These airborne particles can reduce visibility, cause respiratory problems, and have an abrasive effect on machinery. A concentration reducing the visibility to 1/4 mile or less poses hazards for travelers.

3.4.2 Fog. Fog is water droplets suspended in the air at the Earth's surface. Fog is often hazardous when the visibility is reduced to 1/4 mile or less.

3.4.3 Freezing Fog. A fog which freezes upon contact with exposed objects and forms a coating of rime and/or glaze.

3.4.4 Smoke. Smoke in various concentrations can cause significant problems for people with respiratory ailments. It becomes a more universal hazard requiring an NWS response when visibilities are reduced to 1/4 mile or less.

3.4.5 Volcanic Ash. A volcanic eruption can send an ash plume into the atmosphere reducing visibility at the ground and in the air. The chemical composition and abrasive characteristics of the particles varies widely and can seriously affect people and machinery on the ground and aircraft. There is no national minimum threshold for NWS action for the public.

APPENDIX C - Headline Time Phrases

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1. Introduction. This section defines the headline day and time phrases used in non-precipitation weather watch, warning and advisory products.
2. Non-Precipitation Weather Watch Date/Time Phrases. The watch headline will include a general event beginning and event ending day/time phrase. The general day/time phrases are defined in Table C-1.

Time Period Covered	Same Calendar Day Time Phrase	Day +1 Calendar Day Time Phrase	Day + 2 Calendar Day Time Phrase
Midnight - 5:59 AM	Not Applicable	Late Tonight	Late (day + 1) Night
6 AM - 11:59 AM	Not Applicable	(day + 1) Morning	(day + 2) Morning
Noon - 5:59 PM	This Afternoon	(day + 1) Afternoon	(day + 2) Afternoon
6 PM - 11:59 PM	This Evening	(day + 1) Evening	(day + 2) Evening

Table C-1. General headline day/time phrases for long duration watches.

2.1 Issuance Time and Event Start Time on the same Calendar day. When the issuance time and event start time occur on the same calendar day, the watch headline will include the time phrases listed in Table C-1.

Example:

Issuance Time - 4 AM Tuesday
 Event Start Time - 8 PM Tuesday
 Event End Time - 4 PM Wednesday

Watch Headline:

...HIGH WIND WATCH IN EFFECT FROM THIS EVENING THROUGH WEDNESDAY AFTERNOON...

2.1.1 Special Case #1: Similar time phrase for the start and end times. If the start and end time use the same time phrase, then only one time phrase will be used and it will be placed after the end time.

Example:

Issuance Time - 4 AM Tuesday
 Event Start Time - 6 PM Tuesday
 Event End Time - 11 PM Tuesday

Watch Headline:

...HIGH WIND WATCH IN EFFECT THIS EVENING...

2.2 Issuance Time and Event Start Time on Different Calendar Days. When the issuance time and event start time occur on different calendar days, the warning and advisory headline will include the time phrases (Table 2) and day(s) the product is in effect for.

Example:

Issuance Time - 3 PM Tuesday
 Event Start Time - 5 AM Wednesday
 Event End Time - 5 AM Thursday

Watch Headline:

...HIGH WIND WATCH IN EFFECT FROM LATE TONIGHT THROUGH LATE WEDNESDAY NIGHT...

Example:

Issuance Time - 4 PM Tuesday
 Event Start Time - 1 AM Thursday
 Event End Time - 9 AM Thursday

Watch Headline:

...FREEZE WATCH IN EFFECT FROM LATE WEDNESDAY NIGHT THROUGH THURSDAY MORNING...

3. Non-Precipitation Weather Warning and Advisory Date/Time Phrases. Non-precipitation weather warning and advisory headlines will include the time, time zone indicator, and day the warning/advisory is in effect.

3.1 Issuance Time and Event Start Time on the same Calendar day. When the issuance time and event start time occur on the same calendar day, the warning and advisory headline will include the time phrases listed in Table C-2.

Time Period Covered	Same Calendar Day Time Phrase
Midnight - 5:59 AM	Early This Morning
6 AM - 11:59 AM	This Morning
Noon - 5:59 PM	This Afternoon
6 PM - 11:59 PM	This Evening

Table C-2. Headline time phrases for long duration warnings and advisories in effect on same calendar day of issuance.

Example:

Issuance Time - 4 AM Tuesday

Event Start Time - 7 AM Tuesday
Event End Time - 11 AM Wednesday

Warning Headline:

...HIGH WIND WARNING IN EFFECT FROM 7 AM **THIS MORNING** TO 11 AM EST
WEDNESDAY...

3.1.1 Special Case #1: Similar time phrase for the start and end times. If the start and end time use the same time phrase, then only one time phrase will be used and it will be placed after the end time.

Example:

Issuance Time - 10 AM Tuesday
Event Start Time - 1 PM Tuesday
Event End Time - 5 PM Tuesday

Warning Headline:

...HIGH WIND WARNING IN EFFECT FROM 1 PM TO 5 PM MDT **THIS AFTERNOON**...

3.1.2 Special Case #2: If the start time and end time use “Early This Morning” and “This Morning,” then place the time phrase “This Morning” after the end time ONLY.

Example:

Issuance Time - 1 AM Tuesday
Event Start Time - 4 AM Tuesday
Event End Time - 9 AM Tuesday

Advisory Headline:

...WIND ADVISORY IN EFFECT FROM 4 AM TO 9 AM CST **THIS MORNING**...

3.2 Issuance Time and Event Start Time are on Different Calendar Days. When the issuance time and event start time occur on different calendar days, the warning and advisory headline will include the time(s) and day(s) the product is in effect for.

Example:

Issuance Time - 3 PM Tuesday
Event Start Time - 5 AM Wednesday
Event End Time - 5 AM Thursday

Warning Headline:

...FREEZE WARNING IN EFFECT FROM 5 AM WEDNESDAY TO 5 AM EST
THURSDAY...

3.2.1 Special Case #1: If the event start time and end time occur on same day, then the day phrase will be used after the event end time only.

Example:

Issuance Time - 10 PM Tuesday
Event Start Time - 5 AM Wednesday
Event End Time - 5 PM Wednesday

Warning Headline:

...DUST STORM WARNING IN EFFECT FROM 5 AM TO 5 PM CST WEDNESDAY...

3.3 Issuance Time = Event Start Time. When the issuance time and event start time occur simultaneously, the warning and advisory headline will only include the event end time in the headline.

3.3.1 Special Case #1: If the event end time occurs on same calendar day as the issuance time, then use the same calendar rules for the end time phrase set in Table C-1.

Example:

Issuance Time - 4 AM Tuesday
Event Start Time - 4 AM Tuesday
Event End Time - 8 PM Tuesday

Advisory Headline:

...WIND ADVISORY IN EFFECT UNTIL 8 PM PST THIS EVENING...

3.3.2 Special Case #2: If the event end time occurs on a different day than the issuance time, then the day phrase will be used after the event end time.

Example:

Issuance Time - 4 PM Tuesday
Event Start Time - 4 PM Tuesday
Event End Time - 2 AM Wednesday

Warning Headline:

...HIGH WIND WARNING IN EFFECT UNTIL 2 AM CST WEDNESDAY...

3.3.3 Special Case #3: If the issuance time is within three hours of the event start time, then only include the event end time in the headline.

Example:

Issuance Time - 10:15 PM Tuesday
Event Start Time - 1 AM Wednesday
Event End Time - 10 AM Wednesday

Advisory Headline:

...DENSE FOG ADVISORY IN EFFECT UNTIL 10 AM EST WEDNESDAY...

3.4 Time Zone Indicators. The long duration NPW warning and advisory headline will include a time zone indicator after the specific time. If two times are listed, then place the time zone indicator after the second time listed.

3.4.1 Zone Grouping with Two or More Time Zones. If the zone grouping includes more than one time zone, then the additional time zone(s) will be placed in forward slashes next to all time indicators.

Warning Headline:

...HIGH WIND WARNING IN EFFECT FROM 3 AM EDT /2 AM EST/ /2 AM CDT/ TO 10 AM EDT /9 AM EST/ /9AM CDT/ THIS MORNING...

Advisory Headline:

...WIND ADVISORY IN EFFECT UNTIL 8 PM PST /9 PM MST/ TONIGHT...

3.4.2 Warnings and Advisories Issued by Guam. Any long duration warnings and advisories issued by Guam will use "GUAM LST" for the time zone indicator.

Warning Headline:

...HIGH WIND WARNING IN EFFECT UNTIL 3 AM GUAM LST WEDNESDAY...